

CLAIMS

1. An optical recording medium including a substrate on the surface of which a concave and convex shape dividing a track area is formed, comprising on the surface of said concave and convex shape,

a first protective layer for protecting at least an optical recording layer,

the optical recording layer using a chemical compound at least composed of tin (Sn), nitrogen (N) and oxygen (O), formed on the first protective layer,

a second protective layer for protecting the optical recording layer, formed on the optical recording layer, and

a light-transmittable layer formed on the second protective layer.

2. An optical recording medium according to claim 1,

wherein the first protective layer is made of tin oxide.

3. An optical recording medium according to claim 2,

wherein the second protective layer is made of silicon oxide.

4. An optical recording medium according to claim 3,

wherein the optical recording layer is made of a chemical

compound at least composed of tin (Sn), nitrogen (N) and Oxygen (O), whose composition is $\text{Sn}_x\text{N}_y\text{O}_z$ (x, y, z : atomic %) where x, y, z are selected to be

$30 < x < 70$ (atomic %), $1 < y < 20$ (atomic %), and $20 < z < 60$ (atomic %).

5. An optical recording medium according to claim 3, wherein the optical recording layer is made of a chemical compound composed of tin (Sn), nitrogen (N) and oxygen (O) with palladium (Pd) contained, whose composition is $(\text{Sn}_x\text{N}_y\text{O}_z)^{1-a}\text{Pd}_a$ (x, y, z, a : atomic %) where x, y, z, a are selected to be

$30 < x < 70$ (atomic %), $1 < y < 20$ (atomic %), $20 < z < 60$ (atomic %), and $1 < a < 20$ (atomic %).

6. An optical recording medium according to claim 4, wherein at least one of recording and reproduction is performed on the optical recording layer through an objective lens having a numerical aperture of 0.85 ± 0.05 with a laser beam having a wavelength of 380nm to 420nm.

7. An optical recording medium according to claim 5, wherein at least one of recording and reproduction is performed on the optical recording layer through an objective lens having a numerical aperture of 0.85 ± 0.05 with a laser

beam having a wavelength of 380nm to 420nm.